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TEACHING AND LEARNING GUIDE

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"The motivational unconscious": Teaching and learning guide

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AUTHOR'S INTRODUCTION

The cognitive revolution in psychology revived interest in consciousness and, eventually, unconscious mental life. The idea of unconscious processing, now firmly established in research on perception, memory, and other aspects of cognition, has been extended to emotion and motivation as well. The modern scientific conception of unconscious motivation is quite different from the classic view, most famously articulated by Freud, of primitive sexual and aggressive urges resulting in conflict and repression. However, even in the modern view, unconscious motivation is not as firmly established as unconscious perception and memory. My article on "The Motivational Unconscious" surveys three modern approaches to unconscious motivation—automaticity, "subliminal" goal-priming, and implicit motives—and discusses some of the problems confronting each of them.

AUTHOR RECOMMENDS

My paper is divided into three segments, each representing a different aspect of unconscious motivation. Here are three matching core documents.

Bargh, J. A. (1990). Auto-motives: Preconscious determinants of social interaction. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition* (pp. 93–130). New York: Guilford. The seminal statement of Bargh's highly influential theory of "auto-motives"—that motives and goals are automatically evoked by relevant environmental events and operate outside of phenomenal awareness and voluntary control.

Greenwald, A. G., Draine, S. C., & Abrams, R. L. (1996). Three cognitive markers of unconscious semantic activation. Science, *273*, 1699–1702. https://doi.org/10.1126/science.273.5282.1699. Greenwald, a distinguished social psychologist, has done more than anyone else to clinch the case for unconscious priming by "subliminal" (actually masked) stimuli. This paper summarizes his arguments.

McClelland, D. C., Koestner, R., & Weinberger, J. (1989). How do self-attributed and implicit motives differ? Psychological Review, *96*, 690–702. https://doi.org/10.1037/0033-295X.96.4.690. The seminal statement of McClelland's concept of "implicit" or "unconscious" motives, as distinct from explicit or conscious ones.

Despite the fact that motivational self-help books litter airport newsstands and internet vendors like Amazon, there are not too many comprehensive, up-to-date, academic textbooks on motivation. Which is too bad, as it is clear

that, often, textbooks create courses. Before the cognitive revolution, generations of psychology majors cut their teeth on E.R. Hilgard's *Theories of Learning* (1st ed., 1948), which inspired a number of imitators, not the least of which was Hall and Lindzey's *Theories of Personality* (1st ed., 1954) and Deutsch and Krauss's *Theories in Social Psychology* (1st ed., 1965). If there were more good, comprehensive textbooks on motivation, maybe more instructors would offer courses in that area. (There is not really much by way of a textbook for emotion, either: Niedenthal & Ric's *Psychology of Emotion* [1st ed., 2006] is an exception). I attribute this unfortunate situation to collateral damage from the cognitive revolution in psychology and the fact that the modern psychology curriculum in psychology is almost completely dominated by cognition (if you do not believe me, look at your own institution's course offerings, where you will find whole courses on sensation and perception, learning and memory, thinking and problem-solving, and language, a course on development that emphasizes cognitive development, and a course on social psychology that emphasizes social cognition; but rarely will you find free-standing courses on either emotion or motivation, and it is even rare to find more than one). Most of the following are anthologies, rather than single-authored texts with a coherent point-of-view running from beginning to the end, but they all give a good picture of the current state of the field.

Dienstbier, R. B. (Ed.). (1991). *Nebraska symposium on motivation: Perspectives on motivation* (Vol. 38). Lincoln: University of Nebraska Press. Since 1953, this annual symposium has been "the place" to go for the latest in motivation research and theory. This particular volume, celebrating the centenary of psychology at the University of Nebraska, covers a wide range of topics, from homeostatic self-regulation and evolution to attribution theory and self-efficacy.

Gollwitzer, P. M., & Bargh, J. A. (Eds.). (1996). *The psychology of action*. New York: Guilford. Collects articles by a number of prominent investigators exploring the role of automatic processes in motivation and goal-directed behavior.

Heckhausen, J., & Heckhausen, H. (Eds.). (2018). *Motivation and action*. Cham, Switzerland: Springer. The third edition (in English) of a classic, emphasizing European researchers and theorists, but justly celebrated on both sides of the Atlantic. The latest edition of a classic textbook exclusively covers human motivation.

Higgins, E. T. (2012). *Beyond pleasure and pain: How motivation works*. New York: Oxford University Press. A disitinguished social psychologist argues that social motives are not limited to approaching pleasure and avoiding pain, but rather involve seeking of value, control, and truth.

McClelland, D. C. (1985). *Human motivation*. Glenview, Il.: Scott, Foresman. Late statement by the theorist who, more than any other, fostered the study of human social motivation. Emphasizes motivational aspects of human personality, particularly what McClelland called the "three great social motives" of achievement, power, and affiliation. Somewhat dated, but a good place to begin.

Mook, D. G. (1996). *Motivation: The organization of action* (2nd ed.). New York: W.W. Norton. Perhaps the best comprehensive textbook on motivation, with a focus on homeostatis self-regulation and animal research.

Petri, H. L., & Govern, J. L. (2012). *Motivation: Theory, research, and applications* (4th ed.). Bosoton: Cengage. The most current available textbook, covers biological, cognitive, and social approaches to human motivation.

Ryan, R. M. (Ed.). (2012). *Oxford handbook of human motivation*. New York: Oxford University Press. A volume in the prestigious Oxford Library of Psychology provides comprehensive coverage of all aspects of human motivation. The chapters by Aarts and Custers on "Nonconscious goal pursuit" and by Thrash et al. on "Implicit-explicit motive congruence" are directly relevant to (and cited in) my article.

Sansone, C., & Harackiewicz, J. M. (Eds.). (2000). *Intrinsic and extrinsic motivation: The search for optimal motivation and performance*. San Diego: Academic Press. Intrinsic motivation refers to the desire to engage in some activity without the promise or prospect of reward. For a long time, it was believed that rewards necessarily undermine intrinsic motivation, but these editors were leaders in showing that, appropriately structured, rewards could maintain and even enhance intrinsic motivation. This book brings together major contributors to the controversy and advances our understanding of the motivational conditions that bring about optimal performance.

Schultheiss, O. C., & Brunstein, J. C. (Eds.). (2010). *Implicit motives*. Oxford: Oxford University Press. Collects a set of authoritative articles inspired by McClelland's 1989 paper, covering all aspects of implicit motivation.

Shah, J. Y., & Gardner, W. L. (Eds.). (2008). *Handbook of motivation science*. New York: Guilford. Another anthology, whose authors mostly do not overlap with those in the Ryan volume, offering different perspectives on a wide range of topics. Chapters by Ferguson et al., Fishbach and Trope, and Chartrand et al. are particularly relevant to the issues discussed in my article.

ONLINE MATERIALS

Picture-Story Exercise 2013, a survey available on the SurveyMonkey platform at: www.surveymonkey.com/r/CF5XKLK. This site gives users a sense of what it is like to complete the Picture–Story Exercise, a variant on Murray's Thematic Apperception Test (TAT) frequently used in the assessment of "implicit" or unconscious motives. Users write brief stories inspired by a series of pictures. Unfortunately, the stories are not scored and no tabulation appears to be available of the survey results, but students can examine their own stories for material related to such themes as achievement, power, and affiliation/intimacy. *Warning*: Despite inquiries, I have no information about the provenance of this site, who developed the survey, or to what uses it is being put.

A similar site is the "Psychology of Words: Projective Tests and Language" site developed by James Pennebaker, a psychologist at the University of Texas, Austin: http://www.utpsyc.org/TATintro/. There is just one picture (it is one of the actual TAT cards), but an automated content-analysis program developed by Pennebaker provides an individual score for each of the social motives (achievement, power, and affiliation), as well as self-reference, social reference, and positive and negative emotions, and comparison with others who have taken the test online.

This paper completes a trilogy of papers on unconscious processes in cognition, emotion, and now motivation. The study of unconscious mental life is part and parcel of the scientific study of consciousness in general. Unfortunately, undergraduate survey of the literature on consciousness are almost as rare as courses on motivation. Students who are interested in the "deep background" of the present paper may be interested in the website I built to accompany "Scientific Approaches to Consciousness, an advanced undergraduate course that I taught for more than 20 years at UC Berkeley. The website contains written versions of my lectures, expanded and with illustrations, covering the entire gamut of consciousness studies: introspection; various aspects of the mind-body problem, including the neural correlates of hypnosis (how the body influences the mind), psychosomatic effects (how the mind influences the body), and parapsychology (whether we can have minds without bodies); automaticity and the question of free will (whether we have bodies without minds); unconscious processes in cognition, emotion, and motivation (the "trilogy of mind"); altered states of consciousness including coma and anesthesia, sleep and dreams, hypnosis and hysteria, absorption and mindwandering, and meditation; and the origins of consciousness, viewed phylogenetically, ontogenetically, and culturally. URL: https://www.ocf.berkeley.edu/~jfkihlstrom/ConsciousnessWeb/index.htm.

SAMPLE SYLLABUS

Admittedly, I have never taught a full course on motivation—only a single lecture in the context of the introductory course I taught on campus and online for almost 40 years. That lecture, somewhat expanded, is documented on my website at https://www.ocf.berkeley.edu/~jfkihlstrom/IntroductionWeb/motivation_supplement.htm. The full syllabus below is, essentially, an expansion of that lecture. I have no idea how it would work out in actual practice, but it gives some sense of how I, an admitted novice in the area, would make my initial approach to the course. Whatever syllabus you follow, I suspect that coverage of implicit motivation would best occur relatively late in the course, after basic principles have been established.

Week 1: Motivation in the trilogy of mind. Why do people do the things they do? What are they trying to accomplish? Hilgard's (actually Kant's) trilogy of mind, and distinctions among cognitive, emotional, and motivational explanations of behavior. The vocabulary of motivation, beginning with the distinction between approach and avoidance. Role of motivation in everyday "belief-desire" explanations of action. Importance of motivation in establishing "*mens rea*" as well as "*actus rea*" in establishing legal responsibility. Historical trends in motivation in psychological explanations of behavior.

Week 2–3: Motivation as homeostatic regulation. Research, mostly, but not exclusively, involving nonhuman animals on the physiological bases of such "primary" motives as hunger, thirst, and thermoregulation. Set-point theory and obesity. Drive-reduction theories of reinforcement learning.

Week 4: Beyond homeostasis. Aspects of eating and drinking that are not explained by homeostasis. Aggression, sexual behavior, and parenting.

Week 5. The reward system in the brain. Some serious behavioral neuroscience: Pleasure centers, the dopaminergic system.

Week 6: Primary and secondary reinforcement. Motives acquired through learning, with an emphasis on secondary reinforcements such as money and other symbols.

Week 7: Drugs, addiction, and the opponent-process theory of acquired motivation. Makes the point that while many recreational drugs stimulate the reward system, addiction reflects attempts to avoid the pain of withdrawal rather than active seeking of pleasure.

Week 8: Motivation in the psychology of personality. Harlow's studies of contact comfort. Classic theories of human motivation: Freud's drives, Murray's needs, and Maslow's hierarchy. Assessment of human motivation by means of "objective" measures such as the Personality Research Form and "projective" measures such as the Thematic Apperception Test.

Week 9: The three great social motives. Classic research programs on achievement motivation (David McClelland, John Atkinson), power motivation (David Winter), and the intimacy motive (Daniel McAdams).

Week 10: Motivation and cognition. Attributional theories of motivation, with an emphasis on the work of Bernard Weiner and Albert Bandura's research on self-efficacy. Carol Dweck's research on entitativity, incrementalism, and "growth mindset".

Week 11: Extrinsic and intrinsic motivation. Factors that undermine intrinsic motivation, with an emphasis on the work of Mark Lepper. Factors that enhance intrinsic motivation, with an emphasis on the work of Judith Harackiewicz.

Week 12: Development of motivation. How primary and secondary motives change throughout the lifespan, from infancy through adulthood and aging.

Week 13: Unconscious motivation. Most approaches to motivation assume that, at some level, we are aware of our motives and goals, but this might not always, or even ever, be the case. With Freud in the deep background, discuss modern scientific approaches to unconscious motivation, as summarized in this paper.

Week 14: Motivation in sports, at work, in health, and in school. Discuss practical applications of motivation theory and research. How do coaches motivate athletes to perform their best? How do the rest of us motivate ourselves to get out of bed and go to the gym? What is the role of pay in job satisfaction? How do we get patients to take their

medications and engage in health-promoting behaviors? How do we get students to achieve their potential and stretch themselves into unfamiliar and challenging subjects?

Week 15: Conclusion. Reprise the changing role of motivation in psychological research and theory. Whatever happened to emotion and motivation in the aftermath of the cognitive revolution, research and theory on emotion has led to the development of an "affective neuroscience" to compete with cognitive neuroscience. Can a "conative neuroscience," combining psychology and biology in the study of motivation, be far behind?

FOCUS QUESTIONS

1. Some writers insist that emotions, in principle, cannot be unconscious because the very nature of an emotional state is that it is *felt*. Does the same argument apply to motivation? Does it make any sense to have an unconscious desire or goal?
2. On the other hand, some dual-process, theorists have gone so far as to deny the existence of conscious will—that the true causes of our behavior are always unconscious, and our conscious goals and desires are little more than after-the-fact rationalizations. What is your view of free will versus determinism?
3. As noted in the article, some of the seminal studies of automatic goal priming have failed to replicate in other laboratories. What is your view of the "replication crisis" in social psychology? Why might one investigator fail to replicate another's findings despite good-faith efforts to do so?
4. "Subliminal" goal-priming raises the question of subliminal influence in advertising. How likely is it that a subliminal message like "Drink Coke" would lead moviegoers to actually go out to the concession stand and order a soda?
5. In the paper, the term "implicit" is used in a strictly technical sense to refer to mental states that are unconscious. However, some psychologists use "implicit" and "indirect" interchangeably, meaning that an "implicit" measure is only an indirect measure of something that a subject might not want to disclose—somewhat analogous to a lie detector. Does the implicit–explicit distinction boil down merely to a distinction between direct and indirect measurement of conscious motives, or is there something else going on?

SEMINAR/PROJECT IDEA

Too late to be included in my review, Runge and Lang (2019; hereafter, R&L) published a study asking whether subjects could recognize their own motives in the stories they have written during the Picture–Story Exercise. Subjects wrote stories in response to 15 line drawings depicting ambiguous social situations (such as a group of people standing around a bistro table). R&L found that employing a standardized scoring scheme, subjects could score their own responses about as well as experts—suggesting that they had conscious access to their own implicit motives. I think this interpretation is not convincing. True, R&L found that untrained raters could approximate the scores determined by experts; but they might have been surprised by their scores, meaning that they learned something about themselves that they did not already know. Unfortunately, R&L did not assess the subjects' reactions to either their own self-scorings or the scores provided by experts.

Still, students could use the stimulus materials and coding procedures provided by Runge and Lang, available online at https://osf.io/rz4sy/. Or they could respond to some or all of the pictures employed in the traditional, standard version of the Thematic Apperception Test—which is still in print, and probably available in the file drawers of their college psychological clinic or the instructor of their psychology department personality course; then they could simply make up their own coding schemes for identifying themes and imagery related to such motives as achievement, power, and affiliation.

REFERENCE

Runge, J. M., & Lang, J. W. B. (2019). Can people recognize their implicit thoughts? The motive self-categorization test. *Psychological Assessment*. in press. https://doi.org/10.1037/pas0000720

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